

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0006880, DeKalb County
STP-0006-00(880)
Panola Road Corridor Improvements **OFFICE** Preconstruction

FROM *Genetha Rice-Singleton*, Genetha Rice-Singleton, Assistant Director of Preconstruction
cc: Genetha Rice-Singleton **DATE** May 23, 2007

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

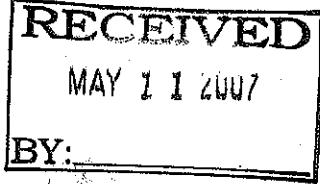
Attached for your files is the approval for subject project.

GRS/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keepler
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Angela Alexander (file copy)
Babs Abubakar;
Bryant Poole
BOARD MEMBER



**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: STP-0006-00(880), DeKalb County
Panola Road Corridor Improvements-
SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road)
P. I. NO. 0006880

OFFICE: District Seven
Chamblee

DATE: January 30, 2007

FROM: Bryant Poole, District Engineer

TO: Genetha Rice-Singleton., Assistant Director of Preconstruction

SUBJECT: Revised Project Concept Report

Attached is the original copy of the Revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

The proposed typical section between the intersections of Panola Road at Snapfinger Road and Panola Road at Browns Mill Road will be reduced from a 4 lane urban section with a 20' center turn lane to a 3 lane urban section with a 14' center turn lane to reduce the impacts to the neighborhoods along this segment. The footprint at the intersections of Snapfinger Road and Browns Mill Road will remain the same as the approved concept. As a result, the Level of Service (LOS) will also remain the same as shown in the approved concept.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE: 5/15/07



State Transportation Planning Administrator

Attachments:

Revised Concept Report
Sketch Map,
Cost Estimate,
Typical Section
Intersection Capacity Analyses
Intersection Sketches
Traffic Volumes

Distribution:

Brian Summers
Harvey Keepler
Keith Golden
Angela Alexander
Jamie Simpson

REVISED PROJECT CONCEPT REPORT

Need and Purpose:

The Panola Road Corridor Improvement project area is located in DeKalb County between Covington Highway and Snapfinger Road. The whole corridor is divided into five project segments. Segment 1 includes Panola Road from SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road); Segment 2 includes Panola Road from SR 212 (Browns Mill Road) to Thompson Mill Road; Segment 3 includes Panola Road from Thompson Mill Road to Fairington Road; Segment 4 includes Panola Road from Fairington Road to Snapfinger Woods Drive; Segment 5 includes Panola Road from Snapfinger Woods Drive to SR 12 (Covington Highway). This concept report is prepared for segment 1: Panola Road from SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road).

Panola Road from SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road) is an urban collector, which provides access to both residential and some commercial properties. Along Panola Road from SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road), the projected 2010 average daily traffic (ADT) is 10,360 vpd and the projected 2030 ADT is 18,460 vpd.

The traffic volumes above indicate that the project corridor is experiencing traffic volume increases that will result in a reduction in vehicular safety and increased congestion. Along this segment from SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road), there is one major unsignalized intersection located at Panola Road of SR 155 (Snapfinger Road). This unsignalized intersection is operating at LOS F in the 2005 AM and PM peak hours and is projected to generate significantly high delay (LOS F) in the 2010 and 2030 no-build scenarios. Table 1 provides the historical accident data for Panola Road from SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road).

Table 1. Historical Accident Summary

PI # 0006880 (From SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road)) Compared to Statewide Urban Collector				
Year	2000 ¹	2001 ²	2002 ³	2003 ⁴
Total Accidents	12	29	27	17
Total Injuries	0	17	4	19
Total Fatalities	0	0	0	0
Accident Rate (per 100 mvm)	365	832	706	415
Statewide Accident Rate (per 100 mvm)	515	540	534	534
Percentage of Statewide Average	71%	154%	132%	78%
Injury Rate (per 100 mvm)	0	488	105	464
Statewide Injury Rate (per 100 mvm)	191	200	199	199
Fatality Rate (per 100 mvm)	0	0	0	0
Statewide Fatality Rate (per 100 mvm)	1.48	1.58	1.22	1.22

Note:

2000 ¹ Accident Data is available only from January to May in 2000. Data were interpolated to December.

2001 ² Accident Data is available from January to December in 2001.

2002 ³ Accident Data is available only from January to April in 2002. Data were interpolated to December

2003 ⁴ Accident Data is available only from January to May in 2003. Data were interpolated to December. Statewide rates were used for 2003.

Panola Road from SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road) currently consists of two 12-foot-wide travel lanes (one in either direction) with no shoulder. The proposed typical section for this segment along Panola Road is 2 12-foot-wide travel lanes (one in each direction) with a 14-foot flush center median. The typical section at the proposed signalized intersection of Panola Road at SR 155 (Snapfinger Road) will be a 4 lane section and this will allow the intersection to function at LOS of B in the 2010 build year and at LOS C in the 2030 design year for peak hour travel times. (The no-build scenarios would operate at LOS F.) All the other unsignalized intersection will operate at LOS B or above in the 2010 build year and at LOS C or above in 2030 design year.

INTERSECTIONS		2005		2010				2030			
		No Build		Build		No Build		Build		No Build	
		LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Panola Road @ SR 155 (Snapfinger Road)	AM	F*	293*	B	15.2	F*	621.5*	C	23.6	F*	12996*
	PM	F*	188.9*	B	11.5	F*	443.7*	B	15.4	F*	5830*
Panola Road @ Browns Mill Road	AM	C	24.3	C	23.6	C	30.3	E	71.9	F	280.2
	PM	B	17.4	C	22	C	22	F	97.4	F	397.1

* The no build condition of this intersection is unsignalized

Project location:

The Panola Road project (PI # 0006880) begins at the intersection of SR 155 (Snapfinger Road) and Panola Road and ends at the intersection of SR 212 (Browns Mill Road) and Panola Road. The project length along Panola Road for this segment is 1.4 miles.

Description of the approved concept:

The Panola Corridor improvement project (PI # 0006880) consists of widening existing Panola Road from two 12' lanes to four 12' travel lanes with 4' bike lanes, 5' sidewalks, and a 20' flush two way left turn lane. All crossroad intersections will be improved based on design year traffic data with improvements to approach lane configurations and turn lane lengths. Roadway widening will normally be symmetrical about existing centerlines, though asymmetrical widening will be performed where factors such as utility impacts, right of way restrictions, or geometric restrictions dictate.

PDP Classification: Minor

Federal Oversight: Full Oversight (), Exempt(X), SF(), Other ()

Functional Classification: Urban Collector

U. S. Route Number(s): None **State Route Number(s):** None

Traffic (AADT) as shown in the approved concept:

Current Year: (2010) 10,360

Design Year: (2030) 18,460

Proposed features to be revised:

Roadway Typical Section – *The proposed typical section between the intersections of Panola Road at Snapfinger and Panola Road at Browns Mill Road will be revised from 4 – 12' travel lanes with 4' bike lanes, 5' sidewalks and a 20' flush center two-way turn lane to 2 – 12' travel lanes with 4' bike lanes, 5' sidewalks, and a 14' flush center two-way turn lane.*

The footprint at the intersections of Panola Road at Snapfinger and Panola Road at Browns Mill Road will remain the same as shown in the approved concept and will continue to provide the same Level of Service (LOS). The segment between the intersections will be reduced to decrease the impacts to the neighborhoods along this segment. The 3 lane section is adequate for the existing and future thru traffic.

Describe the revised feature(s) to be approved:

Roadway Typical Section – *The proposed typical section between the intersections of Panola Road at Snapfinger and Panola Road at Browns Mill Road will consist of 2 – 12' travel lanes with 4' bike lanes, 5' sidewalks, and a 14' flush center two-way turn lane.*

Updated traffic data (AADT): Same as Approved Concept

Current Year: (2010) 10,360

Design Year: (2030) 18,460

Programmed/Schedule:

P.E. LOCAL

R/W: LOCAL

Construction: LR

Revised cost estimates:

1. Construction cost including E&C

Is the project located in a Non-attainment area? Yes No. Concept is consistent with the model which indicates needed improvements to the Panola Road corridor to reduce congestion and improve safety.

Recommendation: It is recommended that the proposed revisions to the concept be approved for implementation.

Attachments:

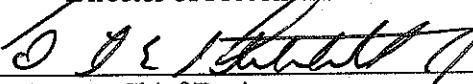
1. Sketch Map,
2. Cost Estimate,
3. Typical Sections
4. Intersection Capacity Analyses
5. Intersection Sketches
6. Traffic Volumes

• Exempt projects

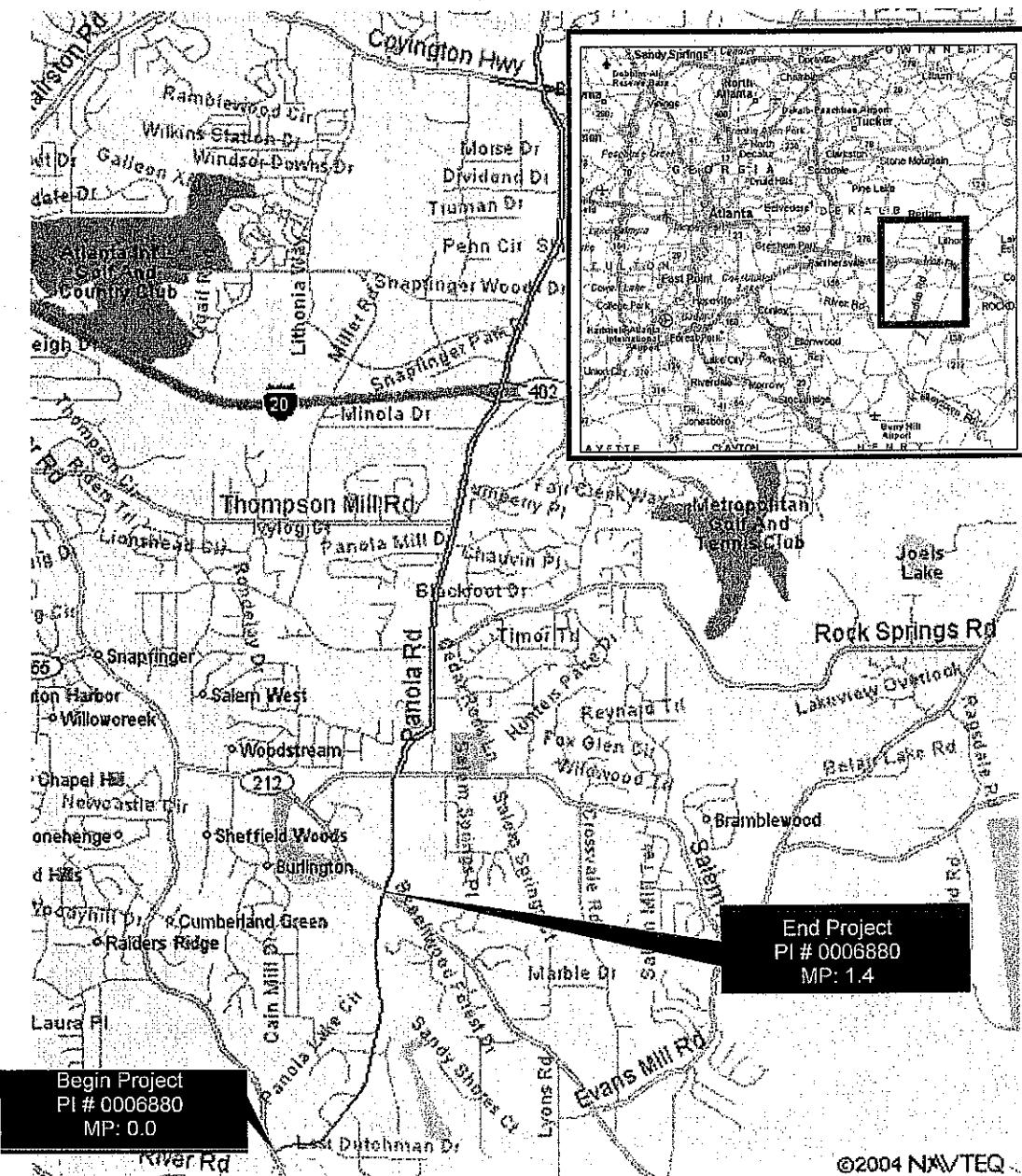
Concur:


Director of Preconstruction

Approve:


Chief Engineer

Project Location Map



PRELIMINARY COST ESTIMATE

PROJECT: PANOLA ROAD CORRIDOR – SEGMENT 1

COUNTY: DEKALB

STP-0006-00(880)

SR 155 (Snapfinger Road) to SR 212 (Browns Mill Road)

DATE: September 30, 2005; revised Jan. 29, 2007

ESTIMATED LETTING DATE:

PREPARED BY: ARCADIS

PROJECT LENGTH: 1.4 mi mainline, 0.5 mi side road

()PROGRAMMING PROCESS
DEV.

(X)CONCEPT DEVELOPMENT

()DURING PROJECT

PROJECT COST		
A. RIGHT-OF-WAY:		
1. PROPERTY (Req'd R/W); 123,900 sf @ \$10/sf		\$ 1,239,000
2. DISPLACEMENTS		\$ 0
3. OTHER COST (ADM./COST, INFLATION)		\$ 0
	SUBTOTAL: A	\$ 1,239,900
B. REIMBURSABLE UTILITIES:		
1. RAILROAD		\$ 0
2. TRANSMISSION LINES 38 minor struct. @ \$10,000/ea, 1 major struct. @ \$100,000/ea, 9550 lf power line @ \$5/lf		\$ 527,750
3. SERVICES EST.		\$ 100,000
	SUBTOTAL: B	\$ 627,750
C. CONSTRUCTION:		
1. MAJOR STRUCTURES		
a. RETAINING WALLS 3500 sf @ \$50/sf		\$ 175,000
b. BRIDGES 0 sf @ \$100/sf		\$ 0
c. DETOUR BRIDGES 0 sf @ \$75/sf		\$ 0
d. BOX CULVERTS 150 lf @ \$420/lf		\$ 63,000
	SUBTOTAL: C-1	\$ 238,000

PROJECT COST			
2. GRADING AND DRAINAGE:			
a. EARTHWORK grading complete, EST			\$ 1,250,000
b. DRAINAGE:			
1) Cross Drain Pipe 15 ea @ \$3200/ea (1 per 700', 4 In section)			\$ 48,000
2) Curb and Gutter 19804 lf @ \$10.50/sf			\$ 207,942
3) Longitudinal System 1.43 mi @ \$200,000/mi			\$ 286,000
SUBTOTAL: C-2			\$ 1,791,942
3. BASE AND PAVING:			
a. AGGREGATE BASE 34,578 Tons x \$12.65/Ton			\$ 437,411
b. ASPHALT PAVING: Surface 4322 Tons x	\$ 90	\$ 388,980	
Binder 11,526 Tons x	\$ 82	\$ 945,132	
Base 11,526 Tons x	\$ 75	\$ 864,450	
c. CONCRETE MEDIAN 0 sy @ 38.00/sy			\$ 0
d. SIDEWALK 11,002 sy @ \$25.00/sy			\$ 275,056
e. OTHER: TACK (12,570 x \$.85/gal)			\$ 10,684
SUBTOTAL: C-3			\$ 2,921,713
4. LUMP ITEMS:			
a. TRAFFIC CONTROL \$500,000/mi x 1.42 mi			\$ 710,000
b. CLEARING AND GRUBBING \$6,000/ac x 8.84 ac			\$ 53,040
c. LANDSCAPING N/A			\$ 0
d. EROSION CONTROL \$80,000/mi x 1.42 mi			\$ 113,600
e. DETOURS N/A			\$ 0
SUBTOTAL: C-4			\$ 876,640
5. MISCELLANEOUS:			
a. LIGHTING \$100,000/mi x 1.42 mi			\$ 142,000

PROJECT COST		
b. SIGNING – STRIPING	\$40,000/mi x 1.42 mi	\$ 56,800
c. GUARDRAIL	(2,000 lf x \$11/lf)	\$ 22,000
d. MEDIAN BARRIER	N/A	\$ 0
	SUBTOTAL: C-5	\$ 220,800
6. SIGNAL MODIFICATION: 2 New Signals @ \$110,000 ea Fiberoptic - \$150,000 x 1.42 mi	SUBTOTAL: C-6	\$ 433,000

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY	\$ 1,239,000	
B. REIMBURSABLE UTILITIES (<i>No Reimbursements</i>)	\$ 627,750	
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$ 238,000	
2. GRADING AND DRAINAGE	\$ 1,791,942	
3. BASE AND PAVING	\$ 2,921,713	
4. LUMP ITEMS	\$ 876,640	
5. MISCELLANEOUS	\$ 220,800	
6. SIGNAL MODIFICATION	\$ 433,000	
SUBTOTAL CONSTRUCTION COST	\$ 6,482,095	
E. & C. (10%)	\$ 688,210	
NUMBER OF YEARS		
TOTAL CONSTRUCTION COST	\$ 7,130,305	
GRAND TOTAL PROJECT COST	\$ 8,997,055	

Panola Road Corridor Capacity Analysis Summary - Design Year 2030

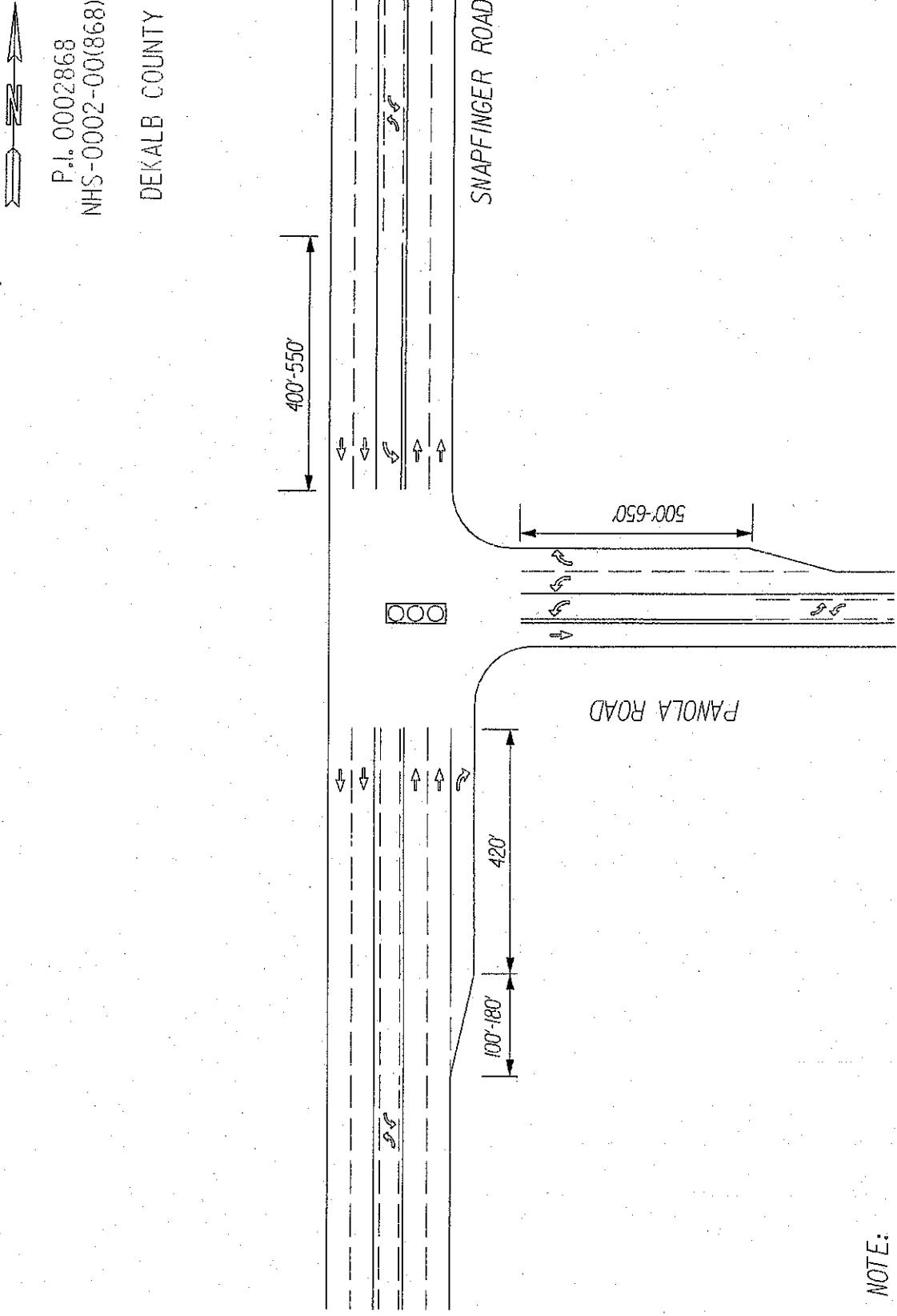
Facility Type	Intersection	3 Lane Road		5 Lane Road	
		Intersection Delay AM(PM)	LOS AM(PM)	Intersection Delay AM(PM)	LOS AM(PM)
Signalized Intersections	Panola Road & Browns Mill Road	66.1(89.1)	E(F)	71.9(97.4)	E(F)
	Panola Road & Snapfinger Road	23.3(12.4)	C(B)	23.6(15.4)	C(B)

	Approach/Movement	Delay in sec/veh		Delay in sec/veh	
		AM(PM)	LOS AM(PM)	AM(PM)	LOS AM(PM)
Unsignalized Intersection	East Bound Appr.	16.9(20.6)	C(C)	11.9(18.1.0)	B(C)
	North Bound Left	10.2 (9.6)	B(A)	10.0 (9.6)	A(A)
	East Bound Appr.	43.6 (28.6)	E(D)	29.6 (21.2)	D(C)
	West Bound Appr.	37.0 (19.1)	E(C)	21.4 (16.5)	C(C)
	North Bound Left	10.6 (10.0)	B(A)	10.7 (10)	B(A)
	South Bound Left	8.8 (9.4)	A(A)	8.8 (9.4)	A(A)
	East Bound Appr.	37.7 (15)	E(B)	18.4 (15.0)	C(B)
	North Bound Left	11.4 (9.5)	B(A)	11.1 (9.6)	B(A)
	West Bound Appr.	46.5 (21.2)	E(C)	16.1 (18.2)	C(C)
	South Bound Left	8.6 (9.8)	A(A)	8.6 (9.9)	A(A)
Panola Road & Minors Creek Circle S	East Bound Appr.	21.5 (13.7)	C(B)	13.2 (13.2)	B(B)
	North Bound Left	11.2 (9.1)	B(A)	11.2 (9.3)	B(A)

Arterial Roadway	Panola Road	Average Travel Speed (mi/hr)		Average Travel Speed (mi/hr)	
		AM(PM)	LOS AM(PM)	AM(PM)	LOS AM(PM)
	North Bound	21.7 (23.1)	D(C)	21.7 (23.1)	D(C)
	South Bound	31.0 (33.0)	B(B)	30.5 (33.6)	B(B)

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NOTE:

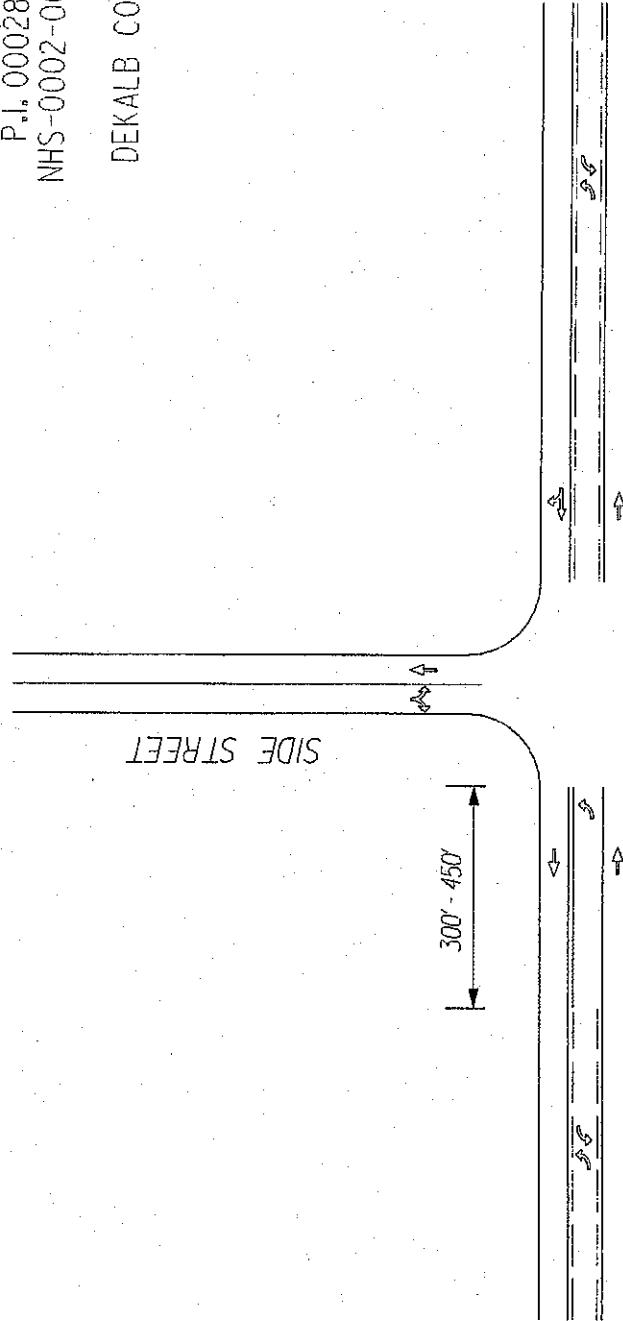
The higher number is desirable;
the lower number is minimum;

NOT TO SCALE



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DEKALB COUNTY



PANOLA ROAD

NOTE:

THIS TYPICAL LANE CONFIGURATION IS APPLICABLE TO:
PANOLA ROAD AT MINERS CREEK CIRCLE S.
PANOLA ROAD AT MINERS CREEK CIRCLE N.
PANOLA ROAD AT TWIN LAKES DR.

NOTE:

The higher number is desirable;
the lower number is minimum;

NOT TO SCALE

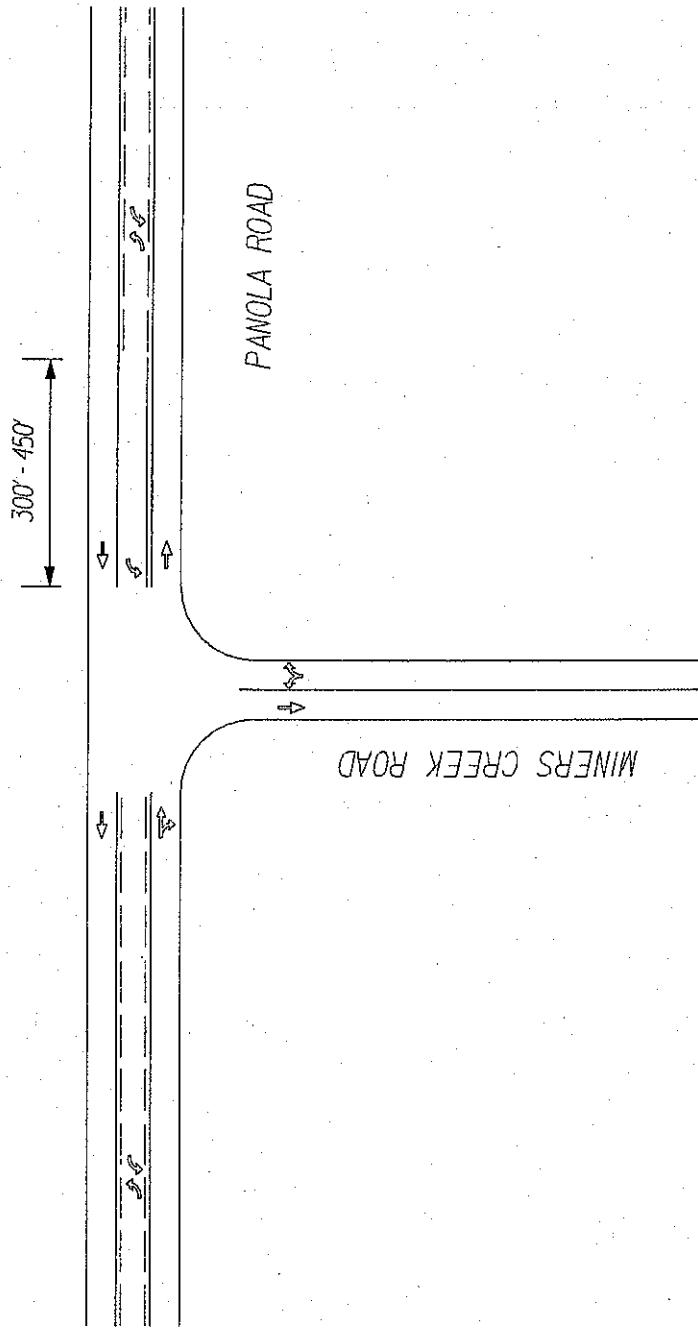


ARCADIS

TYPICAL LANE CONFIGURATION
1

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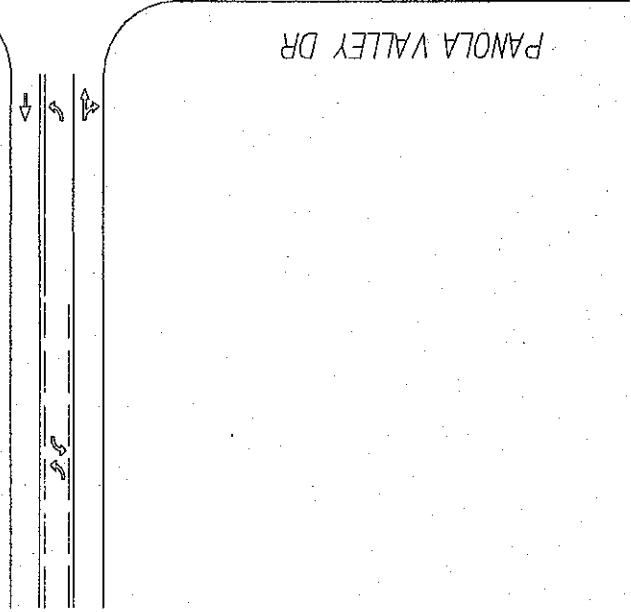
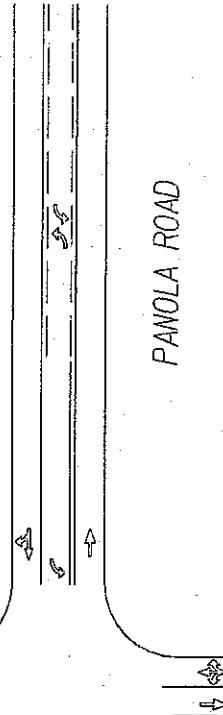
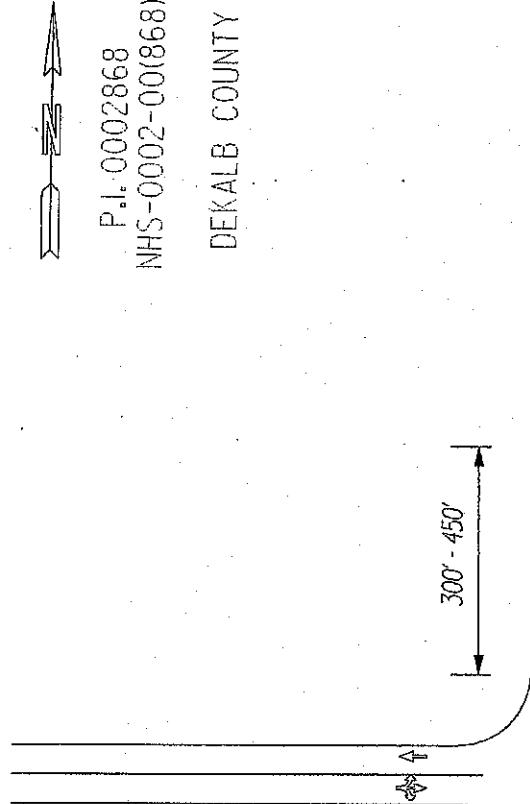
NOTE:

The higher number is desirable;
the lower number is minimum;

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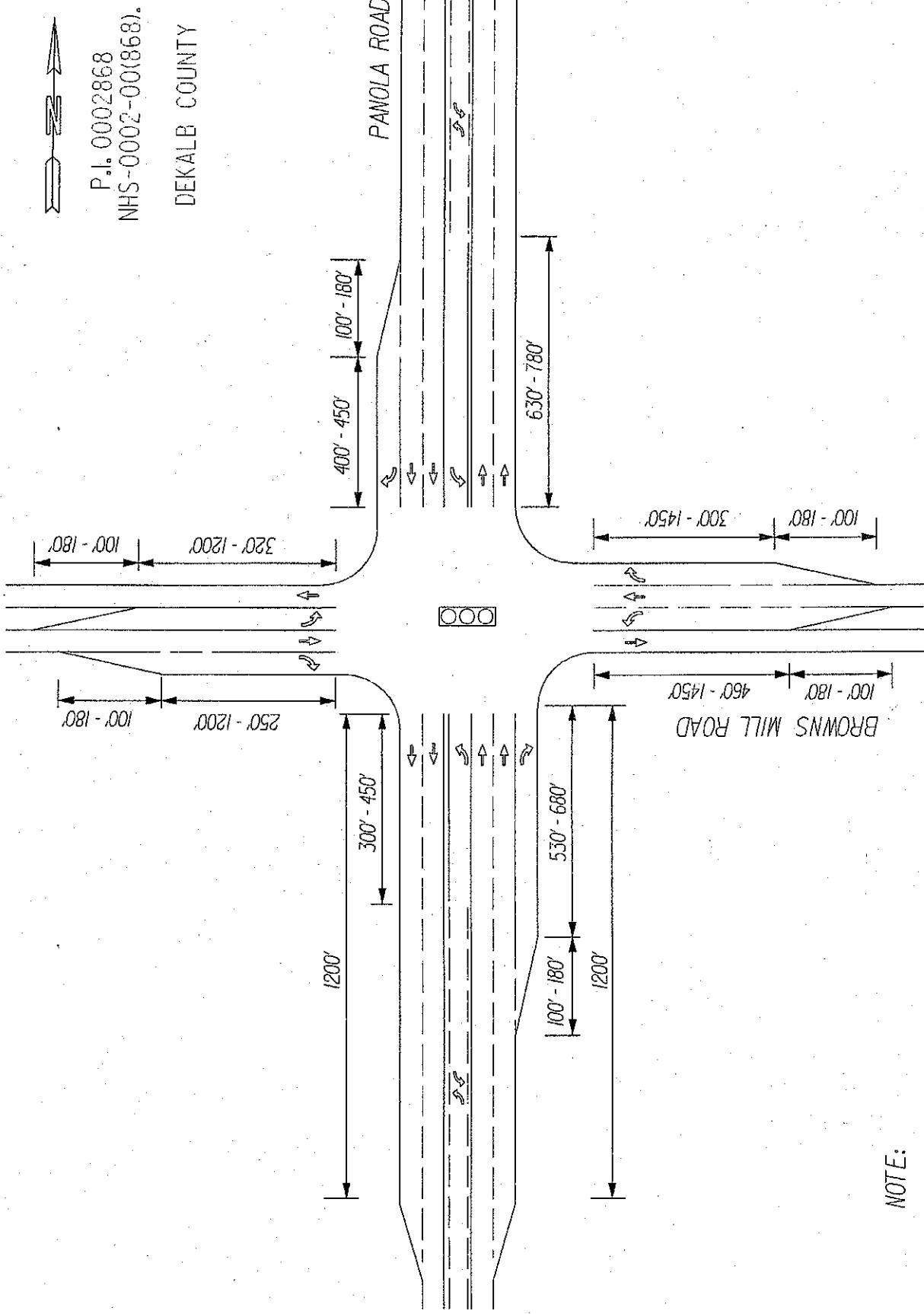
DEKALB COUNTY



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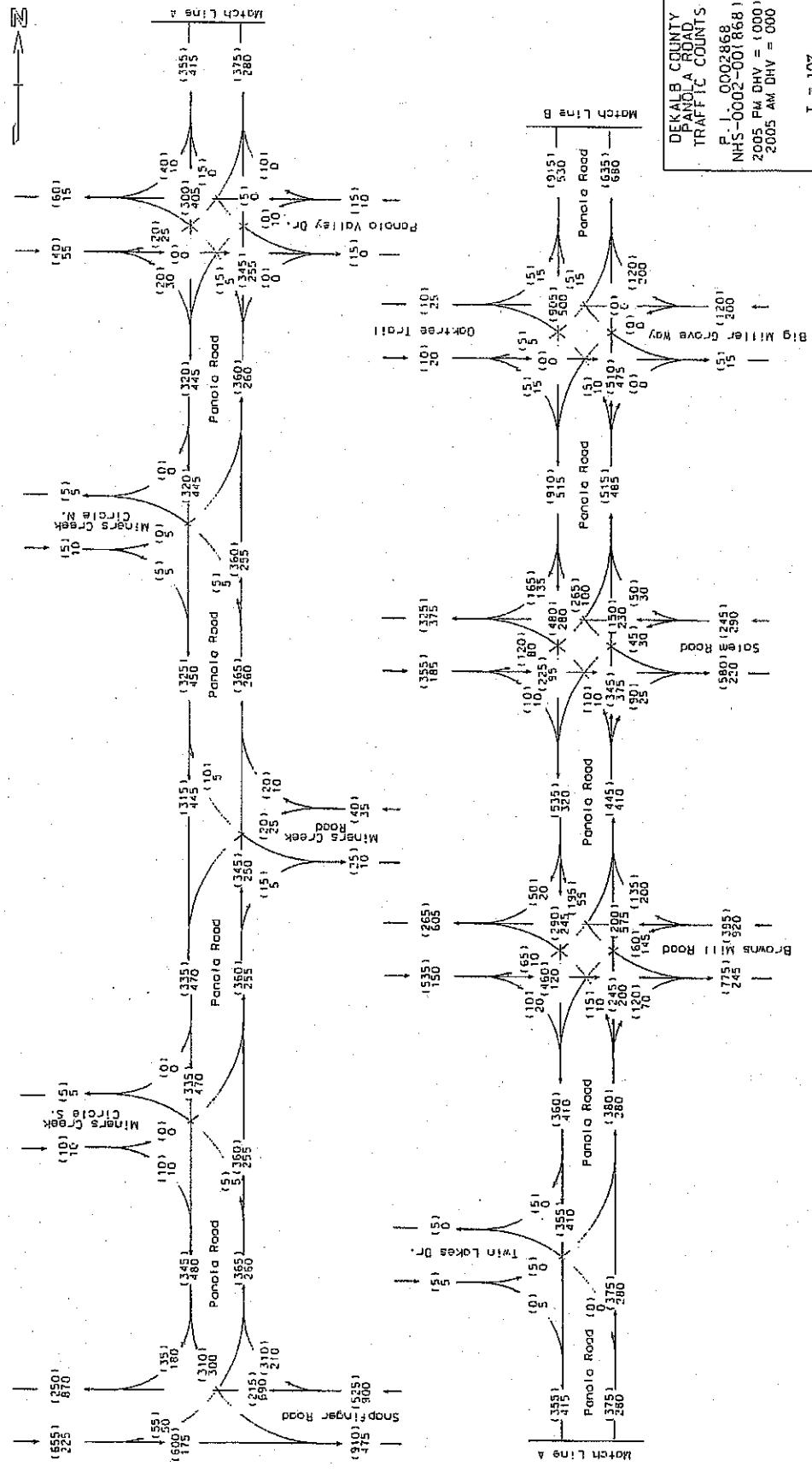
NOTE:

The higher number is desirable;
the lower number is minimum;



2005 Turning Movements

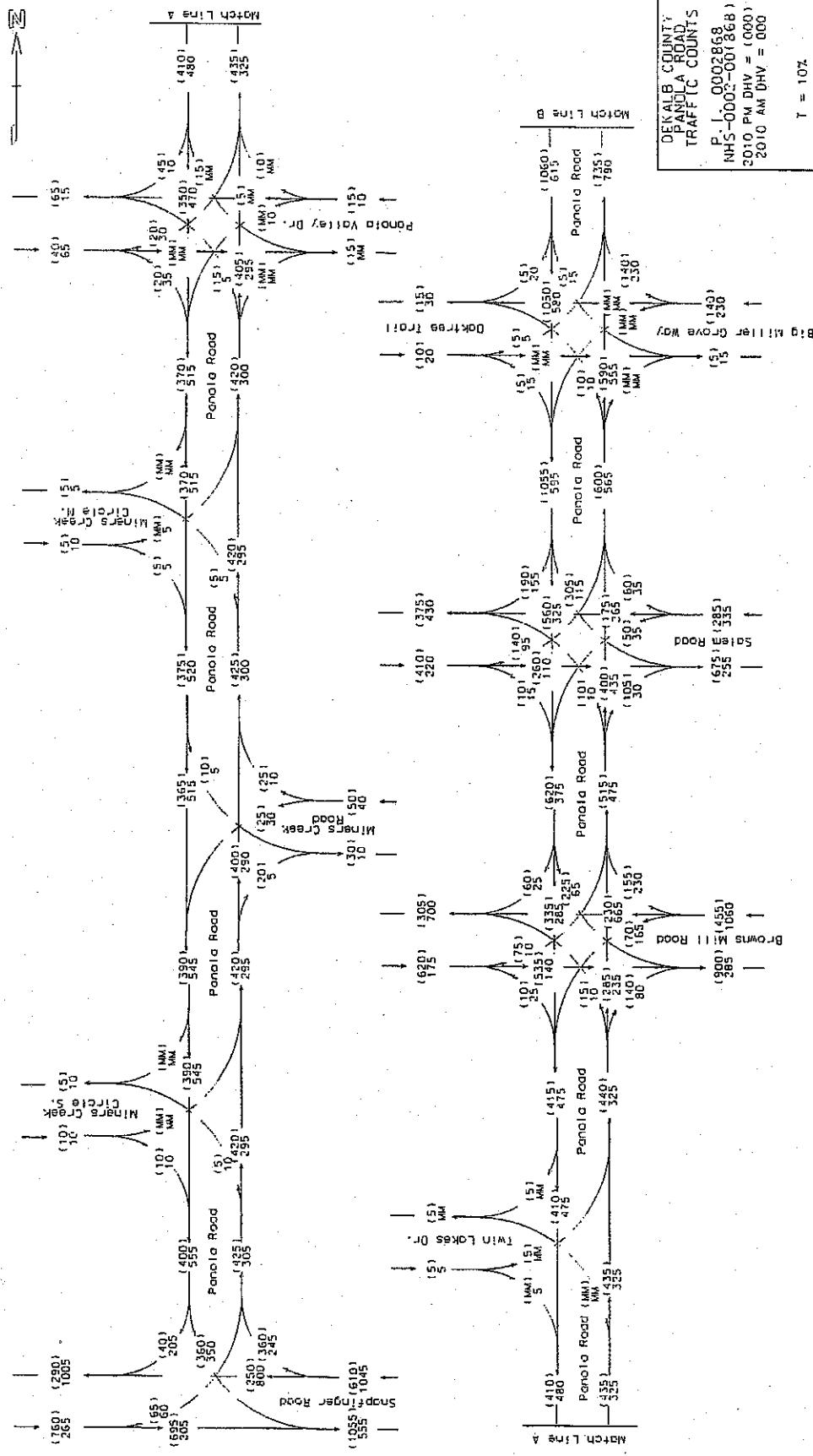
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OFFICE OF ENVIRONMENTAL LOCATION



SHEET 1 OF 3

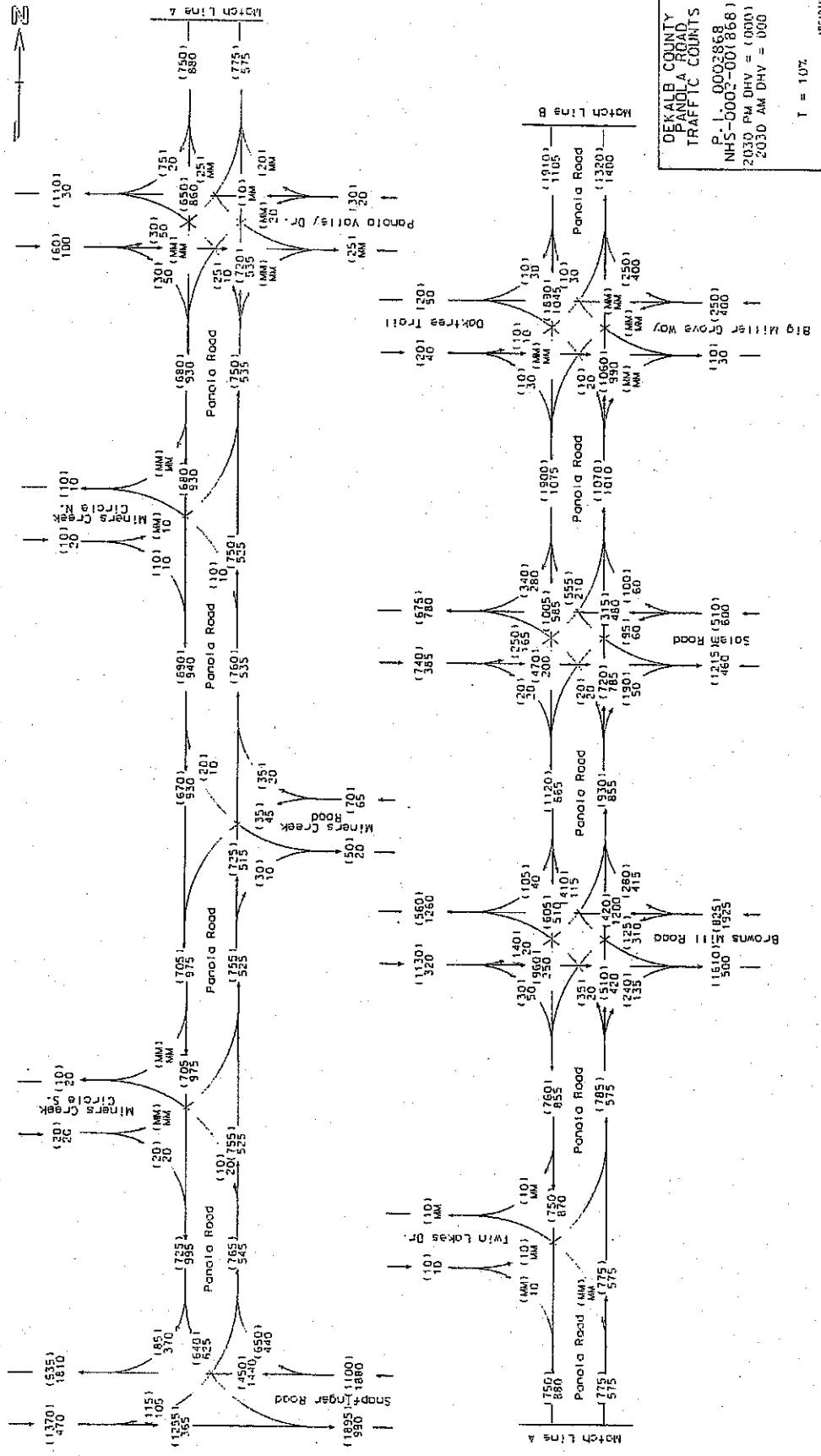
2010 DHV

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OFFICE OF ENVIRONMENT/LOCATION**



2030 DHV

GEOGRAPHIC DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



SHEET 1 OF 3

20 | 01 2030 ADT

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